

Brand name | INCOLOY® Alloy 800HT Nicrofer® 3220 HP

Trade name | Alloy 800 HT

Material No.	EN Designation	UNS	Alloy
1.4959	X8NiCrAlTi32-21	N08811	800 HT

Description | Alloy 800 HT / 1.4959 is an austenitic high-strength solid-solution nickel-iron-chromium alloy.

Special properties | Good resistance to reducing, oxidizing and nitriding atmospheres. Metallurgical stability in long-term application at high temperatures.

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
0.05-0.10	0.70	1.50	0.015	0.01
Cr %	Ni %	N %	Ti ≤ %	Cu %
19.0-22.0	30.0-34.0	≤ 0.030	0.25-0.65	≤ 0.50
Al %	Co %			
0.25-0.65	≤ 0.50			

0.2% Yield strength R_p ≥ N/mm ²	Tensile strength R_m N/mm ²	Elongation A_5 ≥ %	Resistant on air up to °C	Modulus of elasticity kN/mm ²
170	500-750	35	1100	194

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
7.94	460	12	0.99

Suitable welding filler materials | 2.4648

Application | Pressure vessels and steam boilers, chemical industry, petrochemical industry

Available forms for 1.4959 / ALLOY 800 HT	Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
							